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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,784	08/04/2006	Massimo Malavasi	108907-00043	3967
4372	7590	09/23/2010	EXAMINER	
ARENT FOX LLP 1050 CONNECTICUT AVENUE, N.W. SUITE 400 WASHINGTON, DC 20036				LAUX, DAVID J
ART UNIT		PAPER NUMBER		
3743				
			NOTIFICATION DATE	DELIVERY MODE
			09/23/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

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***Response to Arguments***

1. Applicant's arguments filed 09/07/2010 have been fully considered but they are not persuasive.
2. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).
3. In response to applicant's argument that '288 to Hoffert et al does not address TOC, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).
4. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., reducing to a negligible value the fraction of dust that is entrained out of the reactor) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
5. Applicant also argues that '288 fails to disclose quasi-isothermal conditions because '288 describes a 700 °F temperature range. However, quasi-isothermal is a relative term and applicant has not further defined what temperature range can be

considered quasi-isothermal. Under the broadest reasonable interpretation, a temperature fluctuation of 30% or less can be considered quasi-isothermal. Furthermore, a temperature changes in such a combustor happen slowly over a period of time, so any measured temperature over a short period of time would appear quasi-isothermal.

6. Applicant further argues that '288 fails to disclose "without substantial oxygen deficit." Examiner disagrees. '288 discloses that the combustion air to fuel ratio ranges from about 1.0 to 4.0 times the stoichiometric value (Col. 6, lines 38-40). In order for there to be a substantial oxygen deficit, the ratio would have to be well below 1.0.

7. In response to applicant's argument that '288 fails to disclose treating waste materials, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

8. Applicant argues that '288 teaches away from the use of exhaust gas humidification and recirculation as taught by '254 to Munk. Examiner disagrees. '288 does not state that the combustion temperatures are essential to the combustion apparatus. One having ordinary skill in the art would have understood that when utilizing the combustion apparatus of '288, if nitrous oxide production were an issue (due to environmental factors or regulations), additional elements would be necessary to either prevent nitrous oxides from forming in the combustion process or remove them from the flue gas. As is well-known in the art, one way to reduce or eliminate nitrous

oxide production is to reduce the combustion temperature. It would have been reasonable for one having ordinary skill in the art to turn to a reference such as '254 which teaches a method of preventing nitrous oxides from forming without affecting the combustion process by reducing the combustion temperature.

9. /Kenneth B Rinehart/
10. Supervisory Patent Examiner, Art Unit 3743